THINK TWICE BEFORE YOU SIGN ANYTHING AGAIN

12 Business Cases for Digital Signatures
Handwritten signatures are strangled your enterprise. Fortunately, there’s an easy way to break free.

Of all the business operations we fulfill every day, signature requests seem so ordinary we rarely give them a second thought. Yet it’s precisely because they are common—a regular part of just about every business activity or process—that they impose so many costs, obstructions and delays.

Research shows that 80% of all business processes rely on forms. And most of these need to be signed, initiating an expensive “cost cascade.” While not every company is exposed to all of the following expenses, organizations that trim or eliminate any of these expenses will realize measurable benefits to their top and bottom-line operations. Expenses that can be avoided with digital signatures typically include:

- **Printing** pages at $0.03 a sheet
- **Routing** costs, via fax, mail, couriers and overnight shipping, that range from $0.05 to $42.55 per deliverable
- **Scanning and archiving** costs at about $1.33 per document
- **Loss and reproduction** costs of roughly $20.00 for each loss and $40.00 for each reproduction
- **Indirect costs** in delays, lost deals, workflow obstructions, declines in customer or partner satisfaction, and just plain wasted time.

The picture is clear: while signing one document hardly seems burdensome, copying, collecting, storing, distributing, processing and scanning thousands of documents requiring signatures is an expense no enterprise can afford to ignore.
More and more organizations are using digital signatures to automate their signing processes with a degree of security, reliability and simplicity unmatched by other signing technologies, as they allow you to:

**Realize the full benefits of your investments in automation** that currently breaks down every time a signature is required on a document or form.

**Increase process efficiency and reduce process time** as digital signatures open up the bottlenecks currently created by the need to collect ‘wet ink’ signatures.

**Reduce paper-related costs leading to a quick ROI** by eliminating the need to print, route, scan, archive, and reproduce documents that require signing.

**Guarantee confidence inside and outside of the organization** in the validity of the signature, the identity of the signer, and the integrity of the signed document.

**Maintain existing software applications and electronic workflows** by integrating seamlessly with the systems and processes you already have in place.

**Enhance collaboration and satisfaction** across departments and offices, as well as with partners and customers, by rapidly fulfilling signature requests.

**Comply with regulatory requirements** for documented auditable signatures that can be quickly and easily obtained, stored and retrieved.

**Speed up customer and partner signing** by facilitate electronic coordination that enables staff to close deals online with paperless contracts.

**Reduce dependence on IT** by using standards-based technology that cuts down on the time it takes to deploy, update and manage the system.

Because every signature is made on the bottom line

A simple signature becomes a complex cost when it interferes with the otherwise efficient flow of transactions among company employees and between the company and its partners, vendors and most importantly, its customers.

My colleagues and I at ARX have written *Think Twice Before You Sign Anything Again: 12 Business Cases for Digital Signatures* to cut through the confusion and demonstrate the practical business value of implementing digital signatures.

Within the following pages, you’ll find case-by-case examples of business benefits, simple methods for calculating the ROI of digital signatures, and a checklist to help you define the right solution for your enterprise.

Whether you read, skim or scan *Think Twice Before You Sign Anything Again: 12 Business Cases for Digital Signatures*, you’ll never think of a signature in the same way again.

The 3 “i’s of a True Digital Signature

**IDENTITY**
Each user gets a unique, digital “fingerprint” that serves as his identification.

**INTENT**
A digital signature with the right procedures in place requires a user’s attention, making it difficult for users to make subsequent claims of being “unaware” that they had signed a given document for a specific reason or purpose.

**INTEGRITY**
Once signed, the document cannot be changed or altered without detection. Any manipulation immediately invalidates the signature and triggers a visual change that alerts readers, stakeholders and/or examiners.
Fulfill Promises of Paperless Automation Investments

To facilitate collaboration throughout the enterprise, many organizations have embraced electronic document management (DM) solutions, such as Microsoft® SharePoint®, to give employees easy ways to share crucial information, fast.

But signature requests compromise electronic solutions at the “last mile” in the process. When documents need to be printed, signed, scanned, faxed and/or delivered, they reintroduce costs the DM solution was intended to remove. By deploying digital signature capabilities with document management systems, organizations can realize the full value of their automated-workflow investments.

“Adding digital signatures to our SharePoint deployment has changed the way we’ve done business. It has saved us money and significantly improved our customer service.”

Hans Christansen, CEO of CPI

Digital signatures allow CPI to realize the full value of its SharePoint solution

C&P Inspection (CPI), an inspection and quality assurance firm, made a bold leap from paper-based document management to electronic workflows by investing in Microsoft’s SharePoint solution. Its intention? To make it easier for CPI’s worldwide team of inspectors to submit reports from customer locations across the globe.

But to its dismay, CPI found that a considerable amount of paperwork kept creeping back into the process, defeating the purpose—and the value—of its SharePoint solution. CPI IT Manager Carsten Peyk investigated the situation and uncovered the core problem: the engineers’ reports required authenticating signatures, forcing the reintroduction of printed documents into the workflow.

Carsten addressed the problem by incorporating a digital signature solution that allowed engineers to complete the “electronic loop” without paper printouts. By installing the digital signature component to the workflow, not only did CPI save an estimated $3,000 in paper-related costs per signer, per year, it completed the last link in the electronic document process and allowed CPI to reap the full rewards of its SharePoint investment.
ENSURE COMPLIANCE

Whether it’s to ensure conformance of externally imposed regulations, evidence of compliance is key in many industries, particularly in life sciences, healthcare, engineering, government and financial services.

Digital signatures bring certainty to the process, providing users with a fast way to approve forms while satisfying all authorities that the signatures are valid. In a global economy, it is especially important to keep up with various international standards, such as the EU Directive on Electronic Signatures, that allow documents to cross borders without putting your enterprise in the regulatory authorities’ cross-hairs.

“To obtain an approval on a project required us to fax documents from our HQ in the UK to branches around the world. It could take anywhere between three to four weeks to get signatures from all parties. Today, however, the process is completed in 10 minutes. Digital signatures paid for themselves just in terms of increased productivity.”

DALJIT S. CHEEMA, DIRECTOR, CLINPHONE

PAREXEL cuts signing process from two weeks to twenty minutes

As a leading provider of Clinical Technology Services to the pharmaceutical industry, ClinPhone (a subsidiary of PAREXEL, a leading clinical research organization) is under pressure to demonstrate compliance with FDA 21 CFR Part 11 requirements while expediting paperwork across offices around the globe.

Moving papers from continent to continent cost ClinPhone a lot of money—and up to four weeks of time. The company installed a digital signature solution that changed all that, even before investing in an expensive document management system. Once they went electronic and started using digital signatures, ClinPhone got the compliance it needed while getting the speed it wanted: now, all offices can complete the necessary signatures within twenty minutes.
COLLECT APPROVALS ACROSS MULTIPLE LOCATIONS

Many important documents require signatures from participating parties who may be operating in disparate offices, and often in different countries. On paper, these remotely located signers add routing and printing costs (multiple copies distributed to additional signers), not to mention painful delays.

Digital signatures leverage the power of electronic document management solutions by giving signers, regardless of location, an easy way to add their official approvals to any document, from any office, that, in turn, may be routed to any additional locations as needed.

South Carolina Department of Mental Health attains more than 9,500 signed forms a day across 21 locations

Responsible for twenty-one hospitals and community health centers throughout the state, the South Carolina Department of Mental Health (SCDMH) found itself deluged with complex forms that had to meet HIPAA and GPEA regulations.

In addition to requiring the signatures of 3,500 medical staff, most of the documents needed signed authorizations from patients or patient guardians at various locations. SCDMH arrived at a system of digital signatures that allowed patients to sign at “point of service” via kiosk signature pads, with subsequent physician/nurse digital signatures serving as notarization. The digital signature solution not only made it easier to collect approvals from various locations in the SCDMH system, it simplified the entire process of obtaining sequential approvals from the patient or patient guardian to the supervising medical staff.
SECURE AUTHORIZATIONS FROM EXECUTIVES ON THE MOVE

Many executives travel extensively, yet need to sign approvals while on the road to avoid accumulating piles of documents that await their signatures upon their return. Otherwise, important approvals, work orders and deal documents may be shifted into the slow lane—or neglected altogether. Paperwork delays can be further compounded by the time it takes to identify the locations of traveling executives and to route the documents appropriately.

Digital signatures move the workflow online, allowing all parties to distribute and sign documents instantly, via ordinary and widely available network connections, or even smart phones, regardless of location.

Italian Senate coordinates signatures on the move

In addition to its law-making powers, the Italian Senate provides guidelines for government action and holds the government to account. With such broad responsibilities, the 315 senators and their staffers are frequently traveling. Yet their correspondence must be signed to meet Italian regulations.

The Senate’s digital signature solution overcomes the challenges of physical distance, allowing Senators and staffers to create and distribute signed memos from any location, and on the move, without imposing time delays or delivery costs.
MANAGE MULTIPLE APPROVALS

In many complex industries—such as engineering and manufacturing—operations cannot proceed without sequential approvals from multiple authorities. When these are paper-based, the costs in time and speed are obvious. But when they also require sophisticated documentation, such as CAD drawings, the drain on resources becomes onerous.

Digital signatures not only eliminate the slow distribution of approved documents, they make it easy for all participating parties to contribute their authorizations without requiring multiple printouts and routing.

New Flyer soars over capacity strains

A leading manufacturer in the heavy-transit market, New Flyer coordinates Engineering Change Orders (ECOs) from more than 100 engineers. Each order requires five CAD drawings plotted for TIFF and vectorised PDF, approved and signed by three different employees.

Paper orders made matters even more complicated, as many of the orders were generated from a remote office, then physically driven to headquarters for plotting. New Flyer resolved the problem, and increased the productivity of its designers, by incorporating digital signatures into the electronic stream that produces the drawings. Now New Flyer manages 250–350 ECOs per week without printing and scanning costs, and without distribution delays.

“New Flyer was looking to implement an end-to-end digital sign-off process to keep up with its high pressure engineering and manufacturing environment. Using digital signatures allows our engineers to electronically add their signatures and professional seals to CAD, Microsoft Word, Excel, and Adobe® PDF documents, significantly enhancing our processes—reducing paper, scanner and labor costs and eliminating about 25% of the time we needed in the engineering release process.

DAVE FRASER, CAD SYSTEMS MANAGER, NEW FLYER
COLLECT REPORTS FROM FIELD STAFF

Gathering signatures within the same building is an inconvenience. But collecting them from employees who fulfill their duties out in the field is an outright headache—and an expensive one as well.

Whether necessary for billing, contracting or compliance, field reports fulfill a critical role within the operations of many far-flung organizations. Fortunately, digital signatures eliminate the need for costly express delivery services by collecting documentation electronically—and instantly—through secure, online applications.

“Through our use of a digital signature solution, MEDRAD significantly cuts costs in shipping, paper-related products and workload, producing an estimated annual savings of over $150,000. Additionally, our field service representatives are now able to concentrate on work, not paperwork.”

ANGELA GASPHER, IT PROJECT MANAGER, MEDRAD

MEDRAD brings online 15,000–20,000 digital reports from the field

As a leading, worldwide provider of medical imaging devices and services, MEDRAD was responsible for complex, FDA-required service reports gathered from numerous field service representatives. In the FDA market, companies typically spend hundreds of thousands of dollars annually just on priority mailing of signed documents from field staff to the home office or to clients. According to MEDRAD records, that meant controlling between 15,000 to 20,000 Field Service Reports that had to be signed and routed to clients and FDA auditors.

By using a digital signature solution to complete the “last mile” in the electronic document management process, MEDRAD eliminated an enormous paper burden while accelerating the speed at which important records are signed, routed and archived.
CREATE A CUSTOMER PORTAL

As we all know, every customer interaction we move online improves customer satisfaction, accelerates sales and reduces expensive direct customer service costs.

But movement to full-service customer portals can come to a dead halt when signatures are required. Suddenly, the service chain becomes interrupted with a process that must shift to paper. Every action required from a customer can lead to delays—or worse. If customers are required to sign and fax a form, they may defer action, get second thoughts, or change their minds—deals could be lost altogether.

Digital signatures can break up the logjam, allowing portals to collect, with a simple click, the unique identification (under guaranteed data integrity), that the courts, regulators and other authorities demand while facilitating customer action when they are most enthusiastic about closing the deal.

GlobalVetLink is off to the races with an online certification process

GlobalVetLink (GVL), a service enterprise for animal health providers in North America, operates in a strict regulatory environment that carefully monitors animal movement. When horses change ownership, stables or are transported across state lines, a Doctor of Veterinary Medicine (DVM) must complete and sign Official Certificates of Veterinary Inspection (OCVI) and Equine Infectious Anemia (EIA) certificates before the animals can be legally moved.

For GVL, the answer was an online customer portal backed with a digital signature solution that removed paper from the process. With a few simple clicks, the signed certificates can be shared instantly among the DVM, horse owners and animal health authorities. By launching an efficient online portal and enhancing it with compliant digital signatures, GVL captured a market leadership position.

“I was seeking to deploy a new business model that extended access to the Certificate of Health beyond the veterinarian directly to the animal owner. By using digital signatures to ensure we stay in compliance while helping improve efficiency in all aspects of animal health and movement records, we became a reputed leader, enabling us to move from hundreds to thousands of users.”

KEVIN MAHER, PRESIDENT, GLOBALVETLINK
EXPEDITE SERVICE REPORT TURN-AROUNDS

In many service industries, the primary deliverable is a signed report that verifies, evaluates, assesses or qualifies an issue of both business and legal significance for the client. The faster these reports can be submitted, the greater the perceived value to the client and the better the positioning of the vendor.

Digital signatures remove the delivery delays associated with paper (printing, hand-signing, faxing, mailing, hard-copy archiving), allowing companies to share signed reports immediately.

“Digital signatures work seamlessly with the PDF-based reports created in our workflow. Maxxam’s project managers sign and seal around 15,000 reports every month.”

SORIN BOBARIU, APPLICATION-DEVELOPMENT MANAGER, MAXXAM

Maxxam Analytics distills report delivery from 3 days to instantaneously

Project managers in fifteen labs throughout Canada create and submit reports for Maxxam Analytic’s clients in environmental sciences, petroleum testing, food safety and forensics. Each year, they test more than 1,500,000 samples for everything from food contamination to determining paternity.

Naturally, Maxxam’s clients are eager for the lab results. But the necessary signatures must stand on their own without requiring additional software for validation, and must meet legal requirements to stand as evidence in court. By moving to digital signatures, Maxxam not only met all of these requirements, but cut report submission times from 3 days to instantaneous delivery, giving them a considerable advantage over their competitors.
MANAGE PAPERLESS CONTRACTS

For enterprises with numerous clients (such as B2B service providers, utilities, insurance firms, etc.), contract management can become a complex, expensive and time-consuming affair. To drive efficiency, many of these enterprises are turning toward electronic contract management systems that can reduce paperwork and delays.

But signature requests can disrupt the contracting process and re-insert paper into the otherwise digital chain. Digital signatures can help enterprises maintain the electronic integrity of the contracting process, eliminating obstacles to achieving the efficiencies they seek.

“Digital signatures have enabled us to realize a truly paperless process. Without the digital signature solution, we would still be hindering organizational processes by reintroducing some form of paper into our workflow for contract approvals.”

JOHN LAUER, IT MANAGER, ENTERPRISE SERVICES, OGLETHORPE POWER CORPORATION

Oglethorpe Power saves over $300,000 in its first year of digital signature implementation

Based in Georgia, Oglethorpe Power Corporation (OPC) is one of the largest power supply cooperatives in the United States. To accelerate project workflows and reduce costs, they invested in a contract management application that would turn approvals into an electronic process.

Signature obligations, however, interrupted the workflow at the “last mile.” By integrating a digital signature solution with its contract management application, OPC keeps the electronic workflow intact. In just its first year of implementation, the company saved over $300,000 and made a complete return on its investment in just three to four months.
INVOICE ELECTRONICALLY

Today, an ever greater portion of business is conducted, and even fulfilled, electronically. With the Internet as the leading business driver, enterprises must be prepared to submit, transmit and receive invoices electronically, via Web forms or emails.

Digital signatures allow you to work with electronic invoices without compromises in security or issues with acceptability by the customer. Fortunately, today’s digital signatures (unlike previous generations of electronic signatures) are standards-based, meaning that they do not require proprietary software nor downloads on the recipient’s part.

UPS Israel differentiates itself with electronic invoicing for customers

Although it’s recognized as a leading carrier renowned for quality service, UPS refuses to rest on its reputation and continually seeks ways to improve the customer’s experience.

UPS Israel turned to digital signatures to give customers the option of receiving invoices electronically, rather than by paper. Based on a standard technology available with the free Adobe Acrobat Reader, the digital signature didn’t require any special verification software. Within the first month, a much larger number of customers than expected chose the electronic option. The new service helped expedite payment collection for the company’s accounts receivable department while giving customers a convenient way to reduce their dependency on paper.

“UPS Israel prides itself on using innovative IT solutions to differentiate itself from its competitors, improve its customer services, as well as reduce bottom line expenses. Migrating to e-invoicing with a digital signature solution is another example of how UPS obtains competitive advantage.”

EYAL MAYO, UPS ISRAEL
CAPTURE SIGNATURES AT THE POINT OF SALE

Carpe diem or “seize the day”: it applies as much to business as it does to classical philosophy. When the customer is ready to sign on the bottom line, you don’t want to endure any business delays imposed by paper contracts.

When much of your sales force is in the field, however, paper contracts must be circulated by fax or mail. Digital signatures provide the alternative: as legally-binding as “wet” signatures, they have the important advantage of immediacy. Once a document is signed, it can be instantly submitted to initiate action.

“Digital signatures have reduced the time it takes for the organization to complete a sale by 50%. By combining digital signatures with mobile technologies and integrating them into our business process we were able to improve data accuracy, speed processing time, and reduce operational costs.”

ETZION YATSIV, CIO, AIG ISRAEL

AIG-Israel collects signatures at its customers’ homes

Insurance is a very personal matter. In fact, AIG-Israel, a leading insurance and financial services company, completes many of its consumer sales off-site, in the customers’ own homes. In this context, excess paperwork is not only an inconvenience, but an impediment at the least opportune moment—when customers are ready to sign.

AIG-Israel chose a digital signature solution that easily integrated with its central computer facilities for rapid imaging and storage. Accessible via laptops and cellular connections, the solution has allowed AIG-Israel representatives to capture secure and graphical signatures that are completely compliant with Insurance Commissioner and regulatory agency requirements.
COLLABORATE WITH PARTNERS ONLINE

Just as multiple office locations require an efficient way of distributing and approving documents, partners from different organizations need a timely and cost-effective way of collaborating with each other.

Any collaboration, however, requires contracts, change orders, project requests and other approvals that must be signed in order to initiate work. Some smart enterprises are creating online portals, accessible via the Web, to help partners manage the paperwork electronically. By adding a digital signature solution to the portal, required approvals can be securely recorded for all official documentation.

“Kudos to Duke! The money and time this saves Ace Air is very much appreciated!”

MARETTE EKART, ACE AIR (A DUKE REALTY PARTNER)

Duke Realty builds an online portal for its construction partners

With more than 144 million square feet of office, industrial and healthcare properties under management, Duke Realty is one of the largest real estate companies in the United States. In its roles as Design Builder, General Contractor or Contract manager, Duke Realty oversees thousands of contract partners on behalf of its clients.

Wisely, Duke Realty built an online portal, Construction Connect, where the company can easily manage communications, contracting, reporting and more with its partners. Adding the digital signature solution component to the portal eliminated paper from the process, allowing Duke Realty to take advantage of an efficient, entirely electronic, collaborative tool.
10 Things to Look for in a Digital Signature Solution

Not all electronic or digital signature solutions are alike. To find one that meets the rigorous demands of an FDA-regulated environment while delivering optimal business flexibility, look for:

1. Open standards
   Proprietary software can hold your signatures hostage. The FDA-regulated market has embraced standards-based digital signatures for both open and closed system applications. With digital signatures, the resultant electronic records are source documents that are self-contained, portable, and sustainable – independent of the vendor. Even if the vendor goes out of business, the previously signed records can still be verified and trusted.

2. FDA experience
   Within the digital signature market, verify that the vendor has experience in FDA-regulated applications, and supports 21 CFR Part 11 compliance. These requirements leave little room for error and there is much risk in going with an unproven supplier. Choose a vendor whose system has been used by thousands of FDA enterprises and GxP applications.

3. Low total cost of ownership
   Identify all of the costs – obvious and hidden – in putting a digital signature system into place and operating it over time. Ideally, the solution is a turnkey product from a single vendor with no hidden costs. A hodgepodge of technologies and services from multiple suppliers that need to be integrated and maintained may be the most complex and costly solution available. Consider initial investment, ease of installation, integration, management and system administration over a three- to five-year total cost of ownership (TCO).

4. Multiple application support
   The best option should work with the broadest range of desktop applications, including PDF, Office 2003+ Word and Excel, PowerPoint, InfoPath, CAD, and others. Find out if the digital signature technology requires that you have Adobe Acrobat in order to sign PDFs. Ask if support is provided for multiple and sectional signing of Word and Excel files, and if batch signing is supported.

5. Advanced business system integration
   The solution should support standard APIs such as MS CAPI, PKCS#11, JCA and OASIS DSS Web Services. The system may even offer a high level API. Verify that the API is well-documented and easy to use, enabling quick integration within your EDM/ECM, ERP, CRM, LIMS, CTMS, ELN, etc. Since custom integration might also increase the level of effort and validation activities, check with the vendor to see if some standard connectors are available for common business systems like Microsoft SharePoint.
6. SharePoint readiness
   Given its widespread adoption in the life sciences, SharePoint is a critical application that any viable digital signature technology must work with. Confirm that the digital signature technology being considered already has advanced, out-of-the-box support for SharePoint and common add-ons like Nintex or K2 workflow. Also examine the Microsoft partner network in the life sciences market and see which VARs and Microsoft solution providers the vendor is partnered with to support digital signatures.

7. Seamless fit
   The digital signature solution should fit smoothly in your existing and future infrastructure and be easy to install. Choose a product that easily integrates with your existing computing platforms, desktop authoring tools and business systems, as well as user directory service like Microsoft Active Directory or other LDAP structure. The system should not force you to change your existing infrastructure or business processes.

8. High assurance trust
   The digital signature solution should provide High assurance of signer identity, driven by integrating the signer credentialing and authentication of your existing user directory structure (Active Directory or LDAP) with your existing HR on-boarding practices and IT security policies. Medium assurance trust, using ID proofing via e-mail verification, may be good enough for allowing external parties to sign documents, but should not be used for internal employees.

9. Quick installation
   You should be able to install and operate the system in 2 hours at most without requiring extensive on-site services and staff. Perform a quick test or trial of the system to confirm that it is easy to install and easy to use. Ask for references in your industry.

10. Minimal validation efforts
    Go with a standard product from a single vendor requiring minimal custom integration and, hence, computer system validation. Ask for documentation about the vendor’s experience with Qualification and FDA Audits, 21 CFR Part 11 compliance, GxP regulatory support, and typical computer validation activities and support for FDA-regulated installations.
Put digital signatures to work in your organization

Make your operations – and FDA compliance – easier and more efficient. Try the digital signature solution that meets all 10 crucial requirements for FDA-regulated life sciences enterprises with our solution.

About digital signatures

DocuSign / TSCP digital signature solution fully automates approval work-flows, allowing organizations to go paperless, expedite business processes, and eliminate the expenses and time allocations that paper-based signatures require. Our solution is the most widely-deployed digital signature solution in the life sciences industry, employed by over 20,000 FDA-regulated organizations including 8 of the top 10 pharmaceuticals and 6 of the top 10 CROs. Via its standards-based underpinnings, the digital signature solution ensures signer intent, document integrity and compliance, while significantly streamlining business processes. We create a truly collaborative environment for the multiple parties involved in the life sciences ecosystem, enabling trust of electronic documentation spanning geographic locations and across organizations.

Learn more at www.docusign.com
Technical Specifications

Applications and File Types
- Microsoft Word, Excel, PowerPoint and Outlook
- Microsoft SharePoint and InfoPath
- AutoCAD, Bentley MicroStation
- PDF, TIFF, XML, and many more

Document/Workflow Management Systems
- Microsoft SharePoint, K2 and Nintex
- OpenText, Oracle, Alfresco and Laserfiche
- Siemens Teamcenter, SAP, Adobe LiveCycle
- Agile Frameworks, Box, Google Drive, NextDocs
- Additional ECMS and industry-specific applications

Signature Features
- Standard digital signatures (TSCP Bridge)
- Easily verifiable Digital Signatures
- Proof of identity, intent and integrity
- Multiple signers per document
- Customizable signature block
- Unattended and batch signing
- Audit trail and secured time stamps

Authentication Methods
- User Name/Password
- Single Sign On
- One-Time Password (OTP)
- Tokens (Smart Cards, USB-based security tokens)
- Biometric
- RADIUS or OATH-based authentication
- ID Dataweb
- SAML 2.0

Certification Authority (CA)
- TSCP Bridge Cross Certification
- DocuSign DSA Internal (controlled-trust)
- Subordinate CA or External CA
- Signing Key and X.509 Certificate Management
- Key-Management; Private-key Operations
- SHA 256 Document Encryption
- Policy & Procedure Employee
- Provisioning/Revocation
- Certificate Revocation List, Time Stamp Authority

Supported APIs
- DocuSign DSA Signature API (SAPI®) Web Services
- Ready (OASIS DSS,
  Adobe Roaming ID ASSP, and SPML)
- Microsoft CAPI and CAPI-NG PKCS#11
- JCA/JCE

User Directories
- Microsoft Active Directory
- LDAP-based Directories
- Active Directory Federation Services (ADFS)
- Directory Independent Installation

Security and Digital Standards
- NIST FIPS 140-2 level 3 validated appliance
- FIPS 186 and ETSI TS 101 733
- DoD JITC PUBLIC KEY INFRASTRUCTURE (PKI)
- Common Criteria EAL 4 + evaluation for SSCD (Secure Signature Creation Device) certification
- eSIGN, eIDAS, UETA, FDA 21 CFR Part 11
- TSCP Information Labeling Data Handling Specification

Additional Features
- High availability and load balancing
- Supports unlimited number of signers
- High performance signing

Physical Dimensions (DocuSign DSA)
- 1U Rack-Mountable - 18.9” x 22.0” x 1.8” / 47.9cm x 55.9cm x 4.5cm (28 lbs / 12.7 kg)
- 4U Rack-Mountable - 19.0” x 17.5” x 7.0” / 48.3cm x 44.5cm x 17.8cm (30 lbs / 13.6 kg)

Organization or Subordinate CA Cross Certification

[Image of network diagram with various certification logos]